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| 10/759,295 | 01/20/2004 | Guo-Tai Chen | TAIW 206 | 7180 |

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| EXAMINER |
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DICKERSON, CHAD S

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2625

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10/16/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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|------------------------------|--------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 10/759,295 | Applicant(s) CHEN, GUO-TAI | |
| | Examiner Chad Dickerson | Art Unit 2625 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 20 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/20/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:
 - On page 4, line 24: the reference numeral "20" is suggested to be changed to reference numeral "50" in order to correctly correspond to the cutting block.Appropriate correction is required.

Claim Objections

2. Claims 3 and 4 are objected to because of the following informalities:
 - Re claim 3: on line 15, the phrase "computing the intersection" is suggested to be changed to -- computing an intersection --.
 - On line 18, the phrase "using the area correspondence" is suggested to be changed to -- using an area correspondence --. Claim 4 is also objected because of the claim dependence.Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sumiuchi '322 (US Pub No 2003/0231322) in view of Ohtsuka '528 (US Pat No 6278528).

Re claim 1: Sumiuchi '322 discloses print data forming apparatus, print data forming method, and computer readable medium, the image printing method comprising the steps of:

(1) obtaining data of an original image and data of a resulting image by the printer driver, wherein the data of the original image include an original initial point, an original length, and an original width, the data of the resulting image include a resulting initial point, a resulting length, and a resulting width, and the resulting image is obtained after the printer driver resizes the original image (i.e. in Sumiuchi '322, the system obtains original image data, which the image data contains a height and a width in both the x and y directions. Also, as shown in figure 7, the point, considered as an initial point, can be included in the original data with the user designation. There is an image that is a result of the full process and designation of a coordinate after image correction. As shown in figure 8, the portion of the image that cut or trimmed as image data to fit the printer settings (i.e. such as the resolution) is considered as the resulting image. This same image has both a height and width in the x and y directions. In the system, the printer driver is considered to be the printer driver since it is used to drive the print once it performs the above image processing functions; see figs. 2-9; paragraphs [0024]-[0034]);

(2) using the data of the original image and the data of the resulting image to compute a resizing ratio by the printer driver (i.e. the image in regards to the printer resolution is considered as the resulting image data since the image data will be processed to reflect the printing area of the printer resolution. The pixels in the P_x and P_y directions, which refer to directions in the landscape (i.e. horizontal) and portrait (vertical) directions, are used with the same landscape D_x and portrait directions D_y of the original image. These components are used to calculate, or compute, a zoom ratio, which is analogous to a resizing ratio since the zoom ratio is used to determine if magnification or reduction is used in the system. The print filter is used to compute the zoom ratio by the components that make up the filter; see figs. 2-9; paragraphs [0029]-[0044]);

(3) confirming the resizing ratio is greater than one by the printer driver (i.e. in the system, the zoom ratio (α) is confirmed whether it is greater than one in order to determine whether the magnification process will be performed. If the system does not determine that the zoom ratio is greater than one, then a reduction process is performed; see figs. 2-9; paragraphs [0030]-[0050]);

(4) transmitting the data of the original image and the resizing ratio to the printer by the printer driver (i.e. in the system, the print filter, considered as the printer driver, is used transmit information to the print data forming unit in order to form the data to be printed. This information includes the original image data and the zoom ratio. This information is used to form print data to be sent to the printer in the system; see figs. 2-9; paragraphs [0024]-[0043]);

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(5) receiving the data of the original image and the resizing ratio by the printer (i.e. since the information of the original data and the zoom ratio is sent to the forming unit and the forming unit sends this information to the printer as print data, then the system performs the function of sending the original image data along with the zoom ratio applied in the form of print data to the printer; see figs. 2-9; paragraphs [0024]-[0043]);

(6) magnifying the original image according to the resizing ratio to obtain the resulting image (i.e. in the system, the print filter uses the zoom ratio to perform magnification once the system determines that the zoom ratio is greater than one. This enlarges the image data based on the zoom ratio determination; see figs. 2-9; paragraphs [0030]-[0050]); and

(7) printing the resulting image by the printer (i.e. in the system, the formed print data that is a result of the original image data with the applied zoom ratio is printed by the printer (300); see figs. 2-9; paragraphs [0024]-[0043]).

However, Sumiuchi '322 fails to teach (6) magnifying the original image according to the resizing ratio to obtain the resulting image by the printer.

However, this is well known in the art as evidenced by Ohtsuka '528. Ohtsuka '528 discloses (6) magnifying the original image according to the resizing ratio to obtain the resulting image by the printer (i.e. in the system of Ohtsuka '528, the ordering information, which includes the information showing the magnification or the trimming of an area of the image, is input into the photographic printer (5) with the image data. The image data is then magnified or trimmed by the printer based on the printing conditions

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that are included in the ordering information that is input into the printer; see col. 9, lines 17-67 and col. 10, lines 1-11).

Therefore, in view of Ohtsuka '528, it would have been obvious to one of ordinary skill at the time the invention was made to magnifying the original image according to the resizing ratio to obtain the resulting image by the printer in order to have the resolution of the image data converted by the photographic printer using ordering information (as stated in Ohtsuka '528 col. 10, lines 1-11).

Re claim 2: The method of claim 1, wherein when the result of step (3) is negative, further comprising the steps of:

shrinking the original image according to the resizing ratio to obtain the resulting image by the printer driver (i.e. in the system of Sumiuchi '322, if the zoom ratio is less than 1, the reduction process is performed to reduce the image area in a certain direction in order to reduce the size of the overall image. The print filter, considered as the printer driver, is used to determine the zoom ratio and perform appropriate processing; see figs. 2-9; paragraphs [0030]-[0054]);

transmitting the resulting image to the printer by the printer driver (i.e. when the original image has the reduction process performed on the image data, the image data is then combined with other information at the print data forming unit, which generates the image to be printed. The print data to be printed is considered as the resulting data. The print filter transmits the image data to be printed to the printer (300); see figs. 2-9; paragraphs [0030]-[0054]);

receiving the resulting image by the printer (i.e. the printer in the system receives the image data that has been processed; see figs. 2-9; paragraphs [0030]-[0054]); and printing the resulting image by the printer (i.e. the printer is used to print the image that is formed by the print data; see figs. 2-9; paragraphs [0030]-[0054]).

Re claim 3: Sumiuchi '322 discloses print data forming apparatus, print data forming method, and computer readable medium, the image printing method comprising the steps of:

(1) obtaining data of an original image and data of a resulting image by the printer driver and data of a cutting block, wherein the data of the original image include an original initial point, an original length, and an original width, the data of the resulting image include a resulting initial point, a resulting length, and a resulting width, and the resulting image is obtained after the printer driver resizes the original image, and the data of the cutting block cut from the resulting image (i.e. in Sumiuchi '322, the system obtains original image data, which the image data contains a height and a width in both the x and y directions. Also, as shown in figure 7, the point, considered as an initial point, can be included in the original data with the user designation. There is an image that is a result of the full process and designation of a coordinate after image correction. As shown in figure 8, the portion of the image that cut or trimmed as image data to fit the printer settings (i.e. such as the resolution) is considered as the resulting image. This same image has both a height and width in the x and y directions. In the system, the printer driver is considered to be the printer driver since it is used to drive the print

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once it performs the above image processing functions. In reference to figures 5-9, it is clearly seen that the original data goes through a full process, which involves the reduction/enlargement process using the zoom ratio. This image undergoing the process can be considered as the resulting image. The image data trimmed or clipped from the original data can also be considered as the cutting block data. The trimmed image is from an image that has undergone the full process, and this can be considered as a cut block image data from the resulting image data; see figs. 2-9; paragraphs [0024]-[0044]);

(2) using the data of the original image and the data of the resulting image to compute a resizing ratio by the printer driver (i.e. the image in regards to the printer resolution is considered as the resulting image data since the image data will be processed to reflect the printing area of the printer resolution. The pixels in the Px and Py directions, which refer to directions in the landscape (i.e. horizontal) and portrait (vertical) directions, are used with the same landscape Dx and portrait directions Dy of the original image. These components are used to calculate, or compute, a zoom ratio, which is analogous to a resizing ratio since the zoom ratio is used to determine if magnification or reduction is used in the system. The print filter is used to compute the zoom ratio by the components that make up the filter; see figs. 2-9; paragraphs [0029]-[0044]);

(3) confirming the resizing ratio is greater than one by the printer driver (i.e. in the system, the zoom ratio (α) is confirmed whether it is greater than one in order to determine whether the magnification process will be performed. If the system does not

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determine that the zoom ratio is greater than one, then a reduction process is performed; see figs. 2-9; paragraphs [0030]-[0050]);

(4) computing the intersection of the resulting image and the cutting block to obtain the cutting block by the printer driver (i.e. when a determination is performed in order to create data that can fit in the print area, a computation is made to determine how the actual print area intersects with the overall image that has undergone full processing. The area pertaining to the print area is cut from the original data by the print filter and determination of how this intersects with the full processed data is performed. This is shown in figures 6-9; see figs. 2-9; paragraphs [0030]-[0058]);

(5) using the area correspondence relation between the cutting block data and the resulting image data to compute the data of a correspondence block that has the same area correspondence relation with the original image data by the printer driver (i.e. the area determined by the printing area, which trims the original image and the full processed image, is related to both the area cut from the original data, considered as the cutting block data, and the area designated on the full processed data, considered as the resulting image data. Since the designated area corresponds to both the area cut and full processed, this area can be considered as the correspondence block. This same area has the same area correspondence relation with the original image data since the area that is cut in the full processed data corresponds to the original image data before an area is selected for cutting and full processed; see figs. 2-9; paragraphs [0030]-[0058]);

(6) computing an error displacement according to the cutting block data and the correspondence block data by the printer driver (i.e. in the system of Sumiuchi '322, an offset calculation unit (130) is used to calculate an offset according to the print area used to trim the original print data. This process is performed by the print filter, which is considered as the printer driver. The error displacement is considered as the offset in Sumiuchi '322 because both describe the offset in a certain direction on the image data; see figs. 2-9; paragraphs [0030]-[0058]);

(7) transmitting the data of the correspondence block, the error displacement, and the resizing ratio to the printer by the printer driver (i.e. in the system, the area that is trimmed to fit the print area, the offset calculations and the zoom ratio are all sent to the print data forming unit (140), which is used to combine all of these types of data to form an appropriate image to be printed. These types of information are all formed into print data and transmitted by the print filter to the printer; see figs. 2-9; [0030]-[0058]);

(8) receiving the data of the correspondence block, the error displacement, and the resizing ratio by the printer (i.e. the printer in the system receives the print data related to the print area to be printed, the offset of the area that was trimmed to form the print data and zoom ratio that was applied to the print data in order for the printer to form an image relating to print data configured to reflect the different types of data applied to the image data; see figs. [0030]-[0058]);

(9) magnifying the correspondence block according to the resizing ratio and the error displacement to obtain the cutting block (i.e. in the system, the zoom ratio is applied to the print area that is trimmed using the offsets calculated. The printer driver

enlarges the image trimmed in relation to the offsets in the system. Both the offsets and the zoom ratio are used to help obtain an image that is cut from the original data, which is considered as the cutting block; see figs. [0030]-[0058]); and

(10) printing the cutting block by the printer (i.e. in the system, the printer prints out the print data that is sent to the printer. This print data can represent image data that was trimmed down from the original data, which can be considered as a cutting block; see figs. [0030]-[0058]).

However, Sumiuchi '322 fails to teach magnifying the correspondence block according to the resizing ratio and the error displacement to obtain the cutting block by the printer.

However, this is well known in the art as evidenced by Ohtsuka '528. Ohtsuka '528 discloses magnifying the correspondence block according to the resizing ratio and the error displacement to obtain the cutting block by the printer (i.e. in the system of Ohtsuka '528, the ordering information, which includes the information showing the magnification or the trimming of an area of the image, is input into the photographic printer (5) with the image data. The image data is then magnified or trimmed by the printer based on the printing conditions that are included in the ordering information that is input into the printer. Also, the option of trimming an image is a printing condition set in the printer driver. This same option is given printer in order for the printer to perform the processing in relation to the given ordering information, which includes the trimming and rotation of an image; see col. 9, lines 17-67 and col. 10, lines 1-11).

Therefore, in view of Ohtsuka '528, it would have been obvious to one of ordinary skill at the time the invention was made to magnifying the correspondence block according to the resizing ratio and the error displacement to obtain the cutting block by the printer in order to have the resolution of the image data converted by the photographic printer using ordering information (as stated in Ohtsuka '528 col. 10, lines 1-11).

4. The method of claim 3, wherein when the result of step (3) is negative, further comprising the steps of:

shrinking the original image according to the resizing ratio to obtain the resulting image by the printer driver (i.e. in the system of Sumiuchi '322, if the zoom ratio is less than 1, the reduction process is performed to reduce the image area in a certain direction in order to reduce the size of the overall image. The print filter, considered as the printer driver, is used to determine the zoom ratio and perform appropriate processing; see figs. 2-9; paragraphs [0030]-[0054]);

cutting the resulting image according to the cutting block data by the printer driver (i.e. in the system, the full processed image, considered as the resulting image, is cut into an area that is printable by the printer. This printable area designated is considered as the cutting block. The print filter obtains the printable area from the full processed image; see figs. 2-9; paragraphs [0024]-[0050]);

transmitting the cutting block to the printer by the printer driver (i.e. when the image data with a printable area is designated, the image data, along with other data to

process the image, is sent to a print data forming unit in order for the image data that is designated as the printable area to be transmitted to the printer in the system; see figs. 2-9; paragraphs [0024]-[0050]);

receiving the cutting block by the printer (i.e. in the system, the printer receives the data representing the image that is trimmed or clipped for the printer to print the image. Since the original image is clipped or cut to get the print data received by the printer, this performs the feature of the printer to receive the cutting block; see figs. 2-9; paragraphs [0024]-[0050]); and

printing the cutting block by the printer (i.e. in the system, the data transmitted to the printer is printed and this includes the image data clipped from the original data; see figs. 2-9; paragraphs [0024]-[00540]).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chad Dickerson whose telephone number is (571)-270-1351. The examiner can normally be reached on Mon. thru Thur. 9:00-6:30 Fri. 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung Moe can be reached on (571)- 272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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CD/ *CD*
Chad Dickerson
October 3, 2007

[Signature]
AUNG S. MOE
SUPERVISORY PATENT EXAMINER

10/9/07